AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.   (Currently Amended)   A software-implemented method for replacing a loadable software module in an operating system, comprising:

maintaining a reference count for a given software module loaded in the operating system, including maintaining separate reference counts for each loadable version of the given software module;

loading a replacement software module for the given software module into the operating system, including registering version information of the replacement software module with an operating system kernel;

receiving a reference for the given software module after the replacement software module is loaded into the operating system; and

directing the reference for the given software module to the replacement software module when the reference count is greater than zero based on the version information.

2.   (Currently Amended)   The method of Claim 1 further comprises maintaining a second reference count for the replacement software module.

3.   (Original)   The method of Claim 1 wherein the step of directing the reference to the replacement software module further comprises incrementing a reference count for the replacement software module.

4.   (Original)   The method of Claim 1 further comprises unloading the given software module when the reference count is zero.

5.   (Original)   The method of Claim 1 wherein the step of maintaining a reference count further comprises incrementing the reference count when an application invokes a requested function provided by the given software module and decrementing the reference count when the requested function is completed by the given software module.

6.   (Currently Amended)   The method of Claim 1 wherein a reference is further defined as a request for a requested function provided by the given software module.

7.   (Original)   The method of Claim 1 wherein the step of maintaining a reference count is performed by a reference count manager.

8.   (Currently Amended)   A software-implemented method for replacing a loadable software module in an operating system, comprising:

maintaining a first reference count for a loadable software module associated with a kernel of the operating system, including maintaining a separate reference count for each version of the loadable software module;

linking a replacement software module for the loadable software module into the kernel of the operating system, including registering version information of the replacement software module with the kernel;

receiving a resource request for the loadable software module after the replacement software module is linked into the kernel;

directing the resource request for the loadable software module to the replacement software module based on the version information when the first reference count is greater than zero; and

unlinking the loadable software module from the kernel of the operating system when the first reference count is zero.

9.   (Currently Amended)   The method of Claim 8 maintaining a second reference count for the replacement software module.

10.   (Original)   The method of Claim 8 wherein the step of directing the reference to the replacement software module further comprises incrementing a reference count for the replacement software module.

11.　(Original)　The method of Claim 8 wherein the step of maintaining a reference count further comprises incrementing the reference count when a kernel control path starts using the loadable software module and decrementing the reference count when the kernel control path stops using the loadable software module.

12.　(Original)　The method of Claim 8 wherein the kernel of the operating system is further defined as a Linux kernel.

13.　(Original)　The method of Claim 12 wherein the loadable software module is further defined as an access control module operating within the Linux Security Module framework.

14. (Currently Amended) A software-implemented system for coordinating replacement of a loadable software module residing in an execution environment, comprising:

a reference count manager residing in the execution environment and operable to maintain [[a]] separate reference counts in a computer readable medium for each version of the loadable software module; and

a kernel residing in the execution environment and operable to load a replacement software module into the execution environment, the kernel: (a) adapted to receive a resource request for the loadable software module after the replacement software module is loaded and its version information registered with said kernel; and (b) operable to direct the resource request to the replacement software module based on the version information when [[the]] a reference count for a previous version of the loadable software module is greater than zero.

15. (Currently Amended) The computer-implemented system of Claim 14 wherein the reference count manager is operable to maintain a second reference count for the replacement software module.

16. (Original) The computer-implemented system of Claim 14 wherein the kernel is in data communication with the reference count manager to access the reference count upon receipt of the resource request for the loadable software module.

17. (Original) The computer-implemented system of Claim 14 wherein the kernel is further operable to unload the loadable software module when the reference count is zero.

18. (Original) The computer-implemented system of Claim 14 wherein the reference count manager increments the reference count when a kernel control path starts using the loadable software module and decrements the reference count when the kernel control path stops using the loadable software module

19. (Original) The computer-implemented system of Claim 14 wherein the kernel of the operating system is further defined as a Linux kernel.

20. (Original) The computer-implemented system of Claim 14 wherein the loadable software module is further defined as an access control module operating within the Linux Security Module framework.